

THE WATER YEAR IS OFF TO A GREAT START



Reverse Osmosis is used to treat brackish groundwater at WRD's Robert W. Goldsworthy Desalter.

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STORMWATER

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GARDENER
CLASSES

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GROUNDWATER
FESTIVAL

MESSAGE FROM THE PRESIDENT

PRESIDENT'S MESSAGE

Dear Neighbor,

As President of the Water Replenishment District (WRD), I am thrilled to share some fantastic news regarding our ongoing groundwater management practices, new Eco Gardener Program classes, and upcoming events.

First and foremost, I am delighted to highlight the generous amount of rain we received in the early months of the water year. Recent precipitation sets a promising tone for the year ahead. Thanks to the weather, we were able to work with our partners at the Los Angeles County Department of Public Works to use stormwater to fill our groundwater basins. This water helps us safeguard our region from future droughts that are sure to come.

Furthermore, our Eco Gardener Program is launching new classes. We invite all community members to read on to learn more about our new classes. By participating in these programs, we can collectively conserve our precious water resources and foster a greener, more sustainable environment.

Lastly, I invite you to join WRD for any of our groundwater education programs. You can follow us on social media or sign up to receive our digital newsletter to keep up to date on future programming. Follow us on Facebook and Instagram: @WRDsocal

Together, let us celebrate and embrace sustainable practices and look forward to a future filled with abundant water resources and thriving communities.

Joy Langford
WRD Board President



WRD received the WaterReuse Association National Award for Excellence in Outreach and Education for the Albert Robles Center Education Program.



DID YOU KNOW
THE WATER YEAR IS
FROM OCTOBER 1ST
- SEPTEMBER 30TH?



Board President,
Joy Langford
Division 1



Board Vice President,
Robert Katherman
Division 2



Boardmember,
John D. S. Allen
Division 3



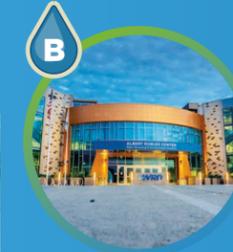
Board Treasurer,
Sergio Calderon
Division 4



Board Secretary,
Vera Robles DeWitt
Division 5

WHO IS WRD?

THE WRD SERVICE AREA



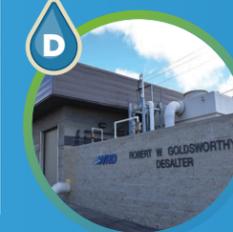
Albert Robles Center for Water Recycling & Environmental Learning (ARC)

WRD's Robb Whitaker Treatment Facility, located on the campus of ARC, purifies 14.8 million gallons of water per day, providing a locally sustainable water supply for groundwater replenishment while bolstering drought-resiliency.



Leo J. Vander Lans Advanced Water Treatment Facility

The Leo J. Vander Lans Facility purifies 8 million gallons of water per day for use in coastal injection wells, preventing seawater intrusion and providing supplemental groundwater replenishment.



Robert W. Goldsworthy Groundwater Desalter

The Goldsworthy Desalter uses reverse osmosis to treat 5 million gallons of brackish (salty) groundwater that is trapped inland due to historical seawater intrusion.

The Water Replenishment District (WRD) is a groundwater management agency responsible for the groundwater resources in southern Los Angeles County. We serve an area covering 43 cities and four million people. WRD is governed by a five-member elected Board of Directors that is voted in for four-year terms.

WRD owns three water treatment facilities, including two water recycling facilities and one groundwater desalter. These facilities, along with our longstanding partnerships with local water agencies, allow us to use recycled water and captured stormwater for groundwater replenishment at the spreading grounds; securing our water future for generations to come.

By treating recycled water at WRD's Robb Whitaker Treatment Facility (RWTF), we can effectively and safely replenish the local groundwater basins. The Robb Whitaker Treatment Facility (RWTF) purifies 14.8 million gallons of water per day. The cycle begins with used water from homes and businesses going to the Los Angeles County Sanitation Districts' facility, where it's cleaned three times. That water travels to RWTF, where it is purified before going to the spreading grounds. This cycle allows us to reuse the resources we already have, and ensures cities and utilities have a sustainable supply of groundwater to serve residents like you.



WRD PIONEERED THE
USE OF RECYCLED WATER
FOR GROUNDWATER
REPLENISHMENT OVER
60 YEARS AGO!



5 FACTS ABOUT RECYCLED WATER

1. We cannot create new water!
2. All water is recycled in nature. Through innovation and technology, we developed a way to speed up the process; creating a sustainable water supply for the region.
3. Wastewater from homes and businesses is treated at the Los Angeles County Sanitation Districts' facility through a 3-step process before being used for irrigation at parks and golf courses.
4. To purify water at ARC we use Ultrafiltration, Reverse Osmosis, and UV Light before delivering it to the spreading grounds for groundwater replenishment.
5. Less energy is used to recycle water than to import it from hundreds of miles away.

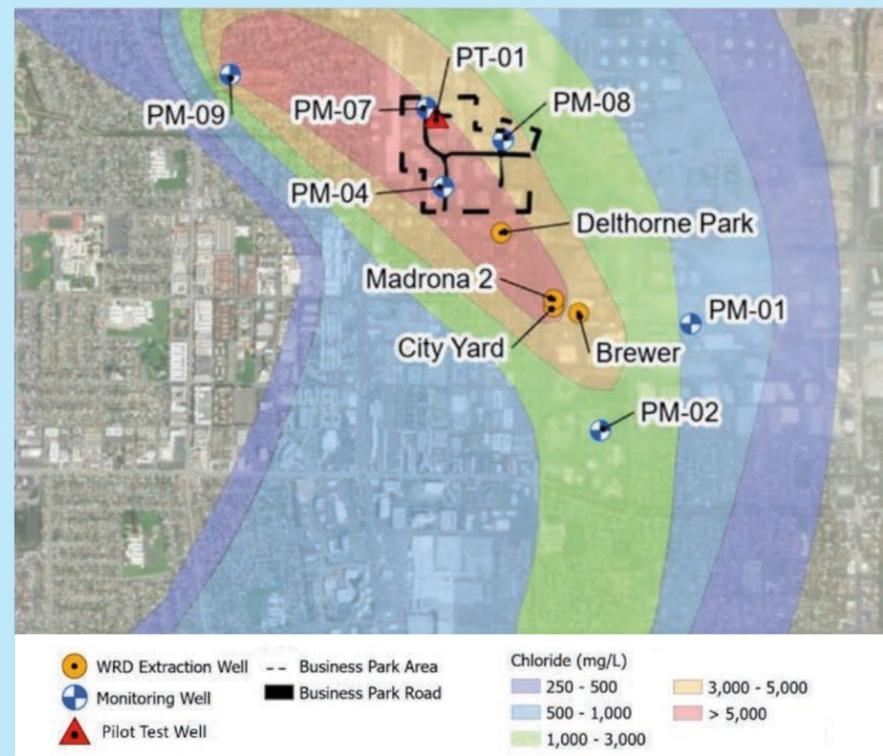
PROJECT UPDATE

BRACKISH GROUNDWATER RECLAMATION PROGRAM

Brackish water is one-fifth as salty as ocean water and is found in the local groundwater basin. Plumes were created when too much freshwater was pumped out of the ground, allowing seawater to seep in. WRD's Brackish Groundwater Reclamation Program (BGRP) aims to remediate an area of salty groundwater in the South Bay that formed in the early 1900s. Remediating this brackish water establishes a new water source, and creates additional storage capacity for freshwater resources. This fosters regional water independence by bolstering reliance on sustainable groundwater sources.

A pivotal aspect of the BGRP involves expanding WRD's Torrance Groundwater Desalter facility, which treats up to 5 million gallons of brackish water daily through reverse osmosis. The expansion project targets cleaning the southern section of the 14-square-mile brackish water plume, producing an extra 2.3 billion gallons (7,100 acre-feet) of drinking water annually.

WRD is currently constructing a pilot treatment unit to test treatment technologies that will be used in the expanded facility. Operation of the pilot unit is scheduled to begin in early 2024. To learn about the history of the brackish water in the groundwater basins scan the QR code below or visit: www.wrd.org/brackish-groundwater-reclamation-program.



The map shows an approximation of salt (chloride) concentrations in our groundwater basin. WRD has installed monitoring wells shown on the map to help better understand where the salt is most concentrated and at what depth. The red triangle (PT-01) denotes the location of the pilot unit.

WHAT IS REVERSE OSMOSIS?

Reverse osmosis uses powerful filters to purify water. Water is forced through filter sheets called membranes that only let clean water through but capture contaminants like salt, chemicals, and bacteria.

HOW IS BRACKISH WATER TREATED?



Water is disinfected and pH is adjusted to create potable drinking water

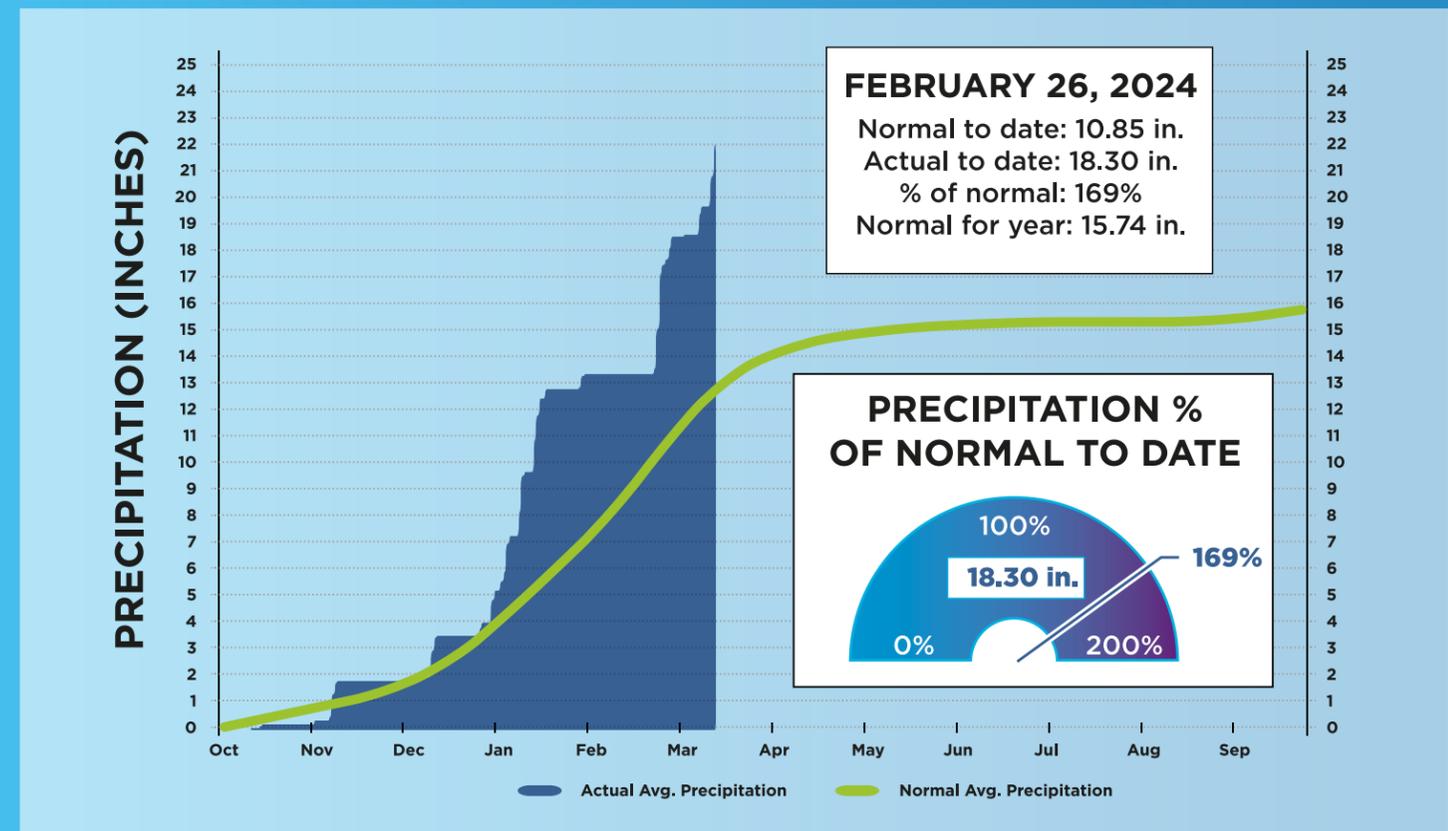
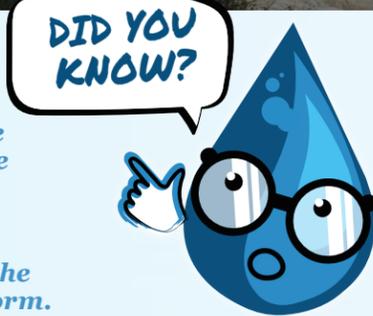
CAPITALIZING ON PRECIPITATION

Locally, the storms of 2022/2023 resulted in our service area receiving record-breaking rainfall amounts with local stormwater capture amounting to just over 197,000 acre-feet (that's over 64 billion gallons!) and recycled water recharging almost 50,000 acre-feet (or 16.2 billion gallons). This equates to a total of approximately 247,000 acre-feet or 80.4 billion gallons used for replenishment within our service area in Water Year 2022-2023! All that rainfall is captured through our partnership with the Los Angeles County Department of Public Works, and they help us channel that stormwater to the San Gabriel and Rio Hondo Spreading Grounds, where the water soaks into the groundwater basins below.

The spreading grounds allow up to 256 million gallons per day and 13 billion gallons per month to soak into the groundwater basins. WRD aims to maximize groundwater storage space by storing water from exceptionally wet years and utilizing recycled water during dry periods, creating a locally sustainable water supply for the region.



The San Gabriel River Rubber Dam is part of the infrastructure that helps us capture stormwater while maintaining flood control functions. The picture is from the February 5, 2024 storm.



The precipitation graph above illustrates the impact of recent storms. Two key observations can be seen in the graph; rainfall is variable throughout the rainy season and the majority of our local precipitation occurs over a short period between November and April. Although precipitation arrived later than expected this rainy season the last few months have been exceptionally wet allowing our region to capture a substantial amount of water for replenishment.

Scan the QR code or visit our webpage at www.wrd.org/groundwater-basin-update to access our monthly groundwater basin update for a comprehensive overview and learn how WRD gathers precipitation data.



SCAN THE QR CODE TO LEARN MORE!

www.wrd.org/brackish-groundwater-reclamation-program



WRD IN THE COMMUNITY



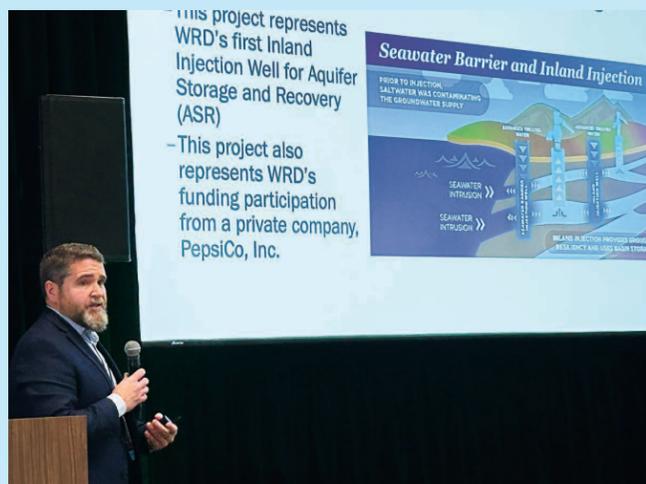
Outgoing President John Allen passes the gavel to newly elected WRD Board President Joy Langford during WRD's Board Reorganization.



WRD staff honors and celebrates African American Heritage Month.



WRD receives the Excellence in Outreach & Education Award from WaterReuse California.



WRD Manager of Engineering, Eric Owens, presented to the California Association of Sanitation Agencies on our Inland Injection Well project and the generous grant WRD received from PepsiCo to help install it.



Aquifer testing is underway in the South Bay as part of WRD's Brackish Groundwater Reclamation Program.



WRD Directors John Allen and Vera Robles DeWitt welcomed Assemblyman Josh Lowenthal at ARC to discuss groundwater sustainability projects.



WRD Directors Robert Katherman and John Allen, General Manager Stephan Tucker with Camille Calimlim Touton, Commissioner of the United States Bureau of Reclamation.

WRD ECO GARDENER PROGRAM



WRD collaborates with cities and non-profit organizations to offer interactive workshops to educate residents about sustainable gardening practices through the Eco Gardener Program. These workshops empower participants with the knowledge and skills to maintain environmentally friendly green spaces while optimizing water usage.

FIND A CLASS NEAR YOU TODAY!

NEW CLASSES ADDED!

THE FREE WORKSHOPS ARE HELD IN COMMUNITY CENTERS ACROSS THE REGION AND COVER VARIOUS TOPICS. SPANISH-LANGUAGE WORKSHOPS ARE ALSO AVAILABLE.

Whether you attend one or attend them all you're sure to get a beautiful lush garden! You can find the full class list and schedule by scanning the QR Code or by visiting our website.



WWW.WRD.ORG/ECO-GARDENER-PROGRAM



SMALL SPACE GARDENING

Even with limited outdoor space, discover the many opportunities to create a beautiful garden.



IRRIGATION FUNDAMENTALS

We can't afford to waste a single drop of water, so join us to learn how to maximize the benefits of irrigation while minimizing the waste.



LANDSCAPE TRANSFORMATION ON A BUDGET

Determine how to prioritize your choices and minimize your costs when it comes to replacing turf with watershed wise landscapes.



GARDENING MYTH BUSTERS

Join us to distinguish fact from fiction when it comes to landscape transformation; you may be surprised by what you discover.



EAT YOUR GARDEN

As food prices increase and the nutritional value of store-bought vegetables decreases, creating your own successful edible garden is more valuable than ever.



RAINWATER CAPTURE

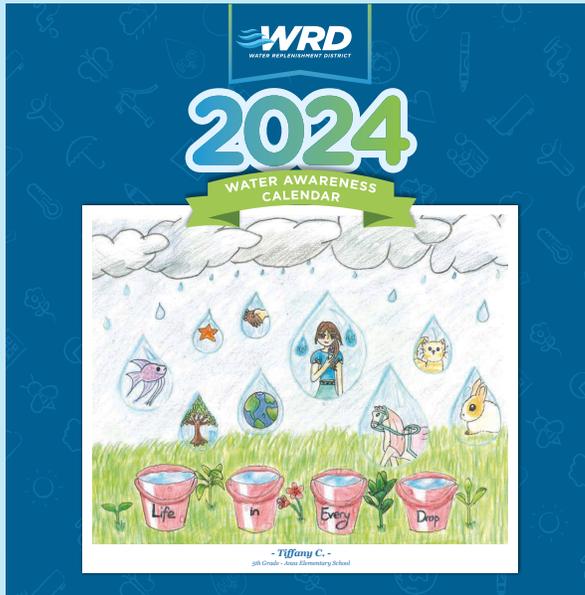
Discover why it's not about how much rain falls from the sky, but rather, how much rain your landscape can hold on to.



WRD CELEBRATES 2024 CALENDAR CONTEST WINNERS

Thank you to the K-6th grade students who participated in the 9th Annual Student Art Calendar Contest! This year, we had over 1,100 submissions, and a panel of judges selected 23 winners, including Grand Prize winner – Tiffany C. from Anza Elementary in the City of Torrance!

The winners' creative and artistic artwork can be seen in our 2024 Water Awareness Calendar, which helps to educate the community about the importance of groundwater and water conservation.



Winners Lincoln V. from Gardenhill Elementary, Lucy U. from Lincoln Elementary, and Ysabella A. from St. Philomena School are announced at their respective school assemblies.

2024 WATER AWARENESS CALENDAR GRAND PRIZE WINNER'S ARTWORK.

THIS YEAR'S CONTEST WILL OPEN IN SUMMER 2024; CHECK OUT OUR WEBSITE FOR MORE DETAILS!

WWW.WRD.ORG/STUDENTARTCONTEST



PUBLIC TOURS!

Have you ever wondered where your water comes from? In southern Los Angeles County, half of that water comes from ancient aquifers right under our feet!

Join us for a free tour of the Albert Robles Center for Water Recycling and Environmental Learning (ARC) to see how we purify water to send to your taps. ARC features an interactive learning center and is open to all ages.

REGISTER FOR AN UPCOMING TOUR BY SCANNING THE QR CODE OR VISIT OUR WEBSITE AT:



RSVP HERE:



[HTTPS://WWW.WRD.ORG/FACILITY-TOURS](https://www.wrd.org/facility-tours)

BOARD OF DIRECTORS



Joy Langford
Division 1



Robert Katherman
Division 2



John D. S. Allen
Division 3



Sergio Calderon
Division 4



Vera Robles DeWitt
Division 5

Stephan Tucker
General Manager

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